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(54) Title: A HYDROPHILIC COATING AND A METHOD FOR THE PREPARATION THEREOF

(57) Abstract: The present invention provides a method for the preparation of a cross-linked hydrophilic coating of a hydrophilic polymer on a substrate polymer surface of a medical device, involving the use of a polymer solution comprising 1-20% by weight of a hydrophilic polymer, 0-5% by weight of additive(s), and the balance of a vehicle with plasticizing effect on the hydrophilic polymer, wherein the vehicle comprises at least one plasticizer having a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and Hansen  $\delta_H$  parameter of less than 20. Furthermore, the invention provides a medical device, e.g. a catheter or guide wire, provided with such a hydrophilic coating. The invention also provides the use of specific polymer solution for the preparation of a cross-linked hydrophilic coating.